# Chapter 531. REGULATIONS FOR WASTEWATER OPERATOR CERTIFICATION PROGRAM

SUMMARY. These rules establish the criteria that a person must meet in order to be certified as an operator of a wastewater treatment plant. Treatment plants are classified as Grades I-V <u>Biological Treatment</u>, <u>Grade I-III Physical/Chemical Treatment</u>, or <u>Spray Irrigation Treatment System</u> according to population equivalents or type of treatment. Certification for each operator Grade I-V <u>Biological</u>, <u>Grade I-III Physical/Chemical or Small or Large Spray Irrigation Treatment Systems</u> is based on education and experience. There are provisions for substituting education for experience as well as certain work experience for actual treatment plant experience.

#### 1. General Conditions

- **A.** <u>Applicability.</u> A <u>Ppersons</u> who <u>is are an</u> operators of <u>a</u> wastewater treatment plants which requires <u>a</u> certified operator under the provisions of Title 32, MRSA, Chapter 62, is subject to these <u>regulations</u> <u>rules</u>.
- **B.** Contract Operators. All proposed contracts for facility operation by any firm or individual must be approved by the Maine Department of Environmental Protection (Department) before the licensee may engage the services of the contract operator, within 2 weeks of the contractor being retained by the permittee. The guidelines for the review of operational contracts are available upon request.
- C. Provisional Certification. Graduates of the New England Regional Wastewater Institute at Southern Maine Vocational Technical Institute, South Portland, Maine (now Southern Maine Community College); the Environmental Technology Course at Eastern Maine Vocational Technical Institute, Bangor, Maine (now Eastern Maine Community College); or other equivalent programs, are eligible for Grade III or lower examination and certification. The examination shall must be as administered by the State of Maine Department of Environmental Protection. Such certification shall be provisional pending successful completion of one year of work experience in a Grade II or higher treatment facility under the direct supervision of a fully certified operator. Following this year, a full certificate may be requested. The Department of Environmental Protection shall then evaluate the quality of the work experience. This evaluation must determine the operators overall proficiency in operations and maintenance of wastewater treatment systems, process control, laboratory procedures and sludge handling processes. If satisfactory, a full certificate will be awarded. This provisional upgrade must be requested, it is not automatic.
- **D.** <u>Applicability to Professional Engineers.</u> Violation of 32 M.R.S.A. <u>Chapter 62</u> §§4171 4182, Sewage Treatment Operators, by <u>an</u> operators who <u>are is a</u> registered professional engineers will be reported to the Maine State Board of Registration for Professional Engineers.
- **E.** <u>Display of Certificate.</u> The wastewater treatment plant operator's certificate issued by the Department of <u>Environmental Protection will must</u> be displayed in a prominent location at the operator's place of work.

**F.** Qualification to Operate Plants by Grade. All wastewater treatment plant operators, unless except those qualifying under 32 MRSA § 4177, who is certified by the Department of Environmental Protection shall be is considered qualified to operate a plant grade equal to or lower than the certificate grade. An Operators qualified under 32 MRSA § 4177 is only permitted to operate the plant in which they were he or she was employed at the time the certificate was issued.

#### 2. Classification of Wastewater Treatment Plants

**A.** Classification of Biological Treatment Plants. All biological wastewater treatment plants will be is classified on a population equivalent (P.E.) of 0.2 lbs. of Biochemical Oxygen Demand (BOD) and 100 gallons per person per day. The treatment plant design capacity will be the major classification criteria in determining such population equivalent. Plant grade will be determined on the following basis except as noted in Section 2(C).

	Secondary-	Advanced	Other Defined
Size (P.E.)	Biological	Treatment*	Treatment**
Up to 5,000	II	III	I
5,000 to 15,000	III	IV	II
15,000 to 50,000	IV	V	III
50,000 and over	V	V	IV

<sup>\*</sup>Advanced treatment includes one or more of the following.

- 1. Advanced biological/chemical methods; and/or
- 2. Ion Exchange, Reverse Osmosis or Electrodialysis; and/or,
- 3. Chemical recovery or Carbon regeneration.

- 1. Separate sludge digestion with gas collection; and/or,
- 2. Mechanical sludge dewatering or sludge incineration.
- **B.** Classification of Physical/Chemical Treatment Plants. All physical/chemical treatment plants will be is classified by the Department of Environmental Protection following a standard evaluation of the facility. These facilities will be classified as Grades I, II, or III.
- C. Classification of Spray Irrigation Treatment Plants. A treatment system including one or more stabilization ponds followed by spray irrigation with no direct discharge to a surface water body is classified as Spray Irrigation Treatment Systems (SITS).
  - 1. A Spray Irrigation Treatment System used to treat only domestic sanitary wastewater having a spray irrigation site size of 10 acres or less is classified as Grade I Spray Irrigation Systems (SITS-I)
  - 2. All other Spray Irrigation Treatment Systems are classified as Grade 2 Spray Irrigation Systems (SITS-II).

<sup>\*\*</sup>Other defined treatment includes one or more of the following.

**<u>CD.Upgrade of Downgrade of Plant Classification.</u>** The Department may upgrade or downgrade individual plants if, in its opinion, the complexity of the plant and degree of skill required for its operation are not properly accounted for in the above categories.

## 3. Requirements For Certification

- A. Operator Grades Five grades of biological treatment system operators, three grades of physical/chemical treatment system operators and two grades of Spray Irrigation Treatment System operators are established to parallel the previously described classification of wastewater treatment plants. Grade I certified operators shall be considered to be qualified to supervise the operation of Grade II certified operators shall be considered as qualified to supervise the operation of Grade II or lower plants; etc. A Grade I certified operator is considered qualified to supervise the operation of a Grade I plant; a Grade V certified operator is considered qualified to supervise the operation of Grade V or lower plants. A person certified to operate a Spray Irrigation Treatment Systems is considered qualified to supervise and operate only systems meeting the criteria established by the Department. A person currently certified to operate a Grade II biological treatment system or higher may operate a Spray Irrigation Treatment System without obtaining additional certification.
- **B.** Qualifications for Certification. Each applicant shall satisfy the experience requirements for the grade of certification requested. Education may be substituted for experience as set forth below. Educational substitutions will be based on the following.
  - (1) High school education or equivalent is credited for two years of experience.
  - (2) Post high school education in approved areas of engineering, science and/or related fields. 30 semester hours, or equivalent, equals 1 year.
  - (3) Specialized training courses will be evaluated on the basis of training credits; six classroom hours of approved courses equals one credit, 45 credits equals one year. Examples. 36 hour course = 6 credits; Sacramento Course = 15 credits per volume.
  - (4) A person attending a course approved by the Department where attendance credit is given in Continuing Education Units (C.E.U.s) is credited with 10 training hours for each C.E.U. earned.
- (4) (5) All experience or education submitted in support of applications which that is not specified in this section shall be evaluated on an individual basis.
- **C.** Examination Requirement. Qualifying examinations are required of all applicants for certification. Persons holding valid certificates in other states may be certified at a comparable grade level without examination, providing all other requirements are met. The applicant must have passed a written examination in the other state before reciprocity can be granted. The other state must also grant reciprocity to operators certified by the State of Maine.
- **D.** <u>Types of Certificates.</u> Certificates will be issued attesting to the holder's ability to operate one <u>or more</u> of <u>two three</u> general types of treatment systems.
  - B = Systems utilizing biological means of treatment;

P/C = Systems utilizing physical or chemical means of treatment; or,

<u>SITS</u> = Systems using spray irrigation as the means of treatment.

<u>A</u> <u>Ccertificates</u> authorizes the holder to operate only that type system for which the certificate was issued.

## E. General Requirements and Definitions

- (1) An Aapplicants for a certificates must is required to pass an examination for that grade.
- (2) Work experience in a treatment plant is defined as that gained in actual performance of important operating functions within any wastewater treatment facility.
- (3) Work experience in a related field includes <u>activities such as</u> plant operation, pilot studies, design, planning, wastewater treatment plant construction, related laboratory work<del>, etc. with the type of process applied for</del>. <u>Activities must be of a kind related to the type of treatment process indicated in the application.</u>
- (4) See Section 3(B) for educational substitutions. Note. High school education is not considered related education for certification purposes.

#### (5) Grade I Operator

<u>The</u> Aapplicants for this grade shall submit satisfactory evidence of graduation from high school or at least two years experience operating a wastewater treatment plant.

#### (6) Grade II Operator

- (A) <u>The</u> Aapplicants for this grade shall submit satisfactory evidence of at least four years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of three years of related education and one year of related work experience.

## (7) Grade III Operator

- (A) <u>The Aapplicants</u> for this grade shall submit satisfactory evidence of at least five years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of at least three years of related education and two years of related work experience.

## (8) Grade IV Operator

(A) <u>The Aapplicants</u> for this grade shall submit satisfactory evidence of at least six years experience in a wastewater treatment plant, three years of which must have been as

- operator of a Grade II or higher plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of at least four years of related education and three years of work experience at a Grade II or higher plant.

# (9) Grade V Operator

- (A) The Aapplicants for this grade shall submit satisfactory evidence of at least eight years experience in a wastewater treatment plant, four years of which must have been as operator of a Grade III or higher plant. Education may be substituted for no more than four years of experience; or
- (B) Submit satisfactory evidence of at least four years of related education and four years of work experience at a Grade III or higher plant.

## (10) Grade SITS - I and Grade SITS - II Operator

- The applicant for this grade shall submit satisfactory evidence of graduation from high school or at least two years experience operating a Small Spray Irrigation treatment system.
- **F.** Advanced Treatment Examination. In addition to satisfying the minimum requirements for operating plants of the appropriate grade level, the operators of an advanced treatment plants must demonstrate by passing an examination approved by the Department, that he or she possesses special knowledge of advanced wastewater treatment. Applicants passing such examinations will be awarded certificates so indicating.

#### 4. Certification Procedure

- A. Application Requirements. All-candidates for a wastewater treatment plant operator's certificate must shall complete an application as furnished by the Department of Environmental Protection. The notarized application, with appropriate fee, should must be forwarded to the address specified by the Department office in Augusta, Maine. A completed applications with all supporting documentation must be received at least six weeks prior to the examination date. Applications received after the published application date will be held for the next examination period.
- **B.** <u>Application Process.</u> <u>An Aapplicants</u> having the necessary qualifications, as set forth in Section 3, for initial certification or for upgrading present classification, will be notified of the scheduled time and place of examination. An Aapplicants not possessing the necessary qualifications for the requested grade will be allowed to reapply for a lower grade as qualified besed on his or her education and experience . <u>An Aapplicants</u> may be examined up to three months prior to being fully qualified for the desired grade.
- **C.** Reexamination. In the event that an applicant fails to pass an examination, the applicant may be re-examined in the same <u>or lower</u> grade after six months, or for certification in a lower grade at the next scheduled examination.

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- Initial certification	\$30.00	
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Re-examination in same grade	<del>15.00</del>	
Biennial renewal fee	20.00	
Reinstatement of certificate	30.00	

- **ED.** Training Requirement. The Department of Environmental Protection shall issue a permanent certificate indicating the classification level of treatment system for which the individual is qualified to act as operator. Certification must be renewed on a biennial basis. Certificate holders with a Grade I-V Biological Wastewater Treatment Plant Operator Certificate, a Grade I-III Physical/Chemical Wastewater Treatment Plant Operator Certificate, or a SITS-II Spray Irrigation Treatment System Operator Certificate shall be required to show proof of completion of at least eighteen 18 clock hours of training during the period that their his or her current certificate was in effect before the certificate may be renewed for the next biennial period. No more than 6 hours of safety training may be used to comply with this requirement. A certificate holder with SS-1 Spray Irrigation Treatment System Operator Certificate is required to show proof of completion of at least 6 clock hours of training during the period that their current certificate was in effect before the certificate may be renewed for the next biennial period. The Department may require an operator who performs permit compliance laboratory work in a facility and who does not adequately demonstrate proper sampling and analysis procedures and techniques during regular compliance inspections to attend additional approved laboratory training. This training must be approved by the Division of Water Resource Regulation Bureau of Land and Water Quality. A list of approved courses is available upon request.
- **FE.** Maintenance of Current Address. Each Ccertificate holders shall be responsible for maintaining a current address on file with the Division of Water Resource Regulation Bureau of Land and Water Quality. Address changes must be submitted to this division Bureau at least two months prior to the expiration of the current renewal period. This certificate will be valid continuously when biennial renewal requirements are satisfied prior to the expiration of the current renewal period, unless otherwise revoked as provided by 32 M.R.S.A. Section §4175.

#### 5. Failure To Renew; Reinstatement

- **A.** <u>Failure to Renew.</u> <u>A.</u> <u>Ccertificates</u> which is not renewed by the deadline for renewal <u>shall</u> becomes inactive. No person, firm or corporation, either municipal or private, may rely on an inactive certificate to satisfy the requirement of 32 M.R.S.A. <u>Section</u> §4181.
- **B.** Reactivation within Six Months of inactivation. A Ccertificate holders who allows their his or her certificates to lapse shall be reinstated if they he or she pays the reinstatement an appropriate administrative fee and shows proof of completion of at least eighteen the clock hours of approved training required in Section 4(D) during the period from two years before to six months after the renewal deadline.
- C. Reactivation after Six Months of inactivation. A Ccertificates that have has been inactive for more than six months but less than two years may be reinstated if the certificate holder pays the reinstatement an appropriate administrative fee and meets all the requirements for initial certification specified in Section 3. Provided that However, the Department of Environmental Protection may, in its discretion, waive the examination requirement, if it finds that the holder of the certificate has performed his or her duties satisfactorily and in a manner that demonstrates that an examination is not necessary.

- **D. Loss of Certification.** A Certificate holders who allows their his or her certificates to remain inactive for two years or longer shall be removed from the master list of certified operators as maintained by the Department. A certificate holder whose name has been so deleted shall be is required to submit an application for initial certification and examination to be certified in the future.
- 6. Applicability of Certificates. All certificates issued prior to the effective date of these regulations shall authorize the holder to operate biological treatment systems of the grade indicated on the certificate or lower.
- 7. Effective Date. These regulations shall be effective upon the date of filing with the Secretary of State and shall supersede all previous regulations adopted by the Board dealing expressly with the certification of wastewater treatment plant operators.

After public notice and public hearing November 21, 1977, the above regulations are hereby adopted this 21st day of December, 1977.

AUTHORITY. 33 M.R.S.A. Section 4179 and 38 M.R.S.A. Section 361

EFFECTIVE DATE. March 28, 1975

Amended. May 20, 1977 Amended. February 8, 1978 Amended. May 4, 1984 Amended. May 11, 1987

Amended.